

Shmakov, M. I.

AID P - 2125

Subject : USSR/Engineering

Card 1/1 Pub. 35 - 14/20

Author : Shmakov, M. I.

Title : ~~Field survey and determining of density of sand-gravel layers~~
Field survey and determining of density of sand-gravel layers

Periodical: Gidr. stol., no.3, 39-40, 1955

Abstract : A new method based on the author's experience is offered for determining the weight of sand-gravel layers. The device used to determine the density is shown in a diagram.

Institution: None

Submitted : No date

AUTHORS: Tizdel', R.R. and Shmakov, M.I., Engineers SOV/98-59-1-5/14

TITLE: An Experimental Rolling of Gravel Grounds (Opytnaya ukatka galechnykh gruntov)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 3, pp 26-29 (USSR)

ABSTRACT: The Moscow section of Gidroenergoprojekt made a series of experiments with rolled gravel grounds to determine their density, humidity water-permeability, granulometric composition and resistance to shifting. Though eight experimental terraces were built and, each of them in a different way, no correlation between the density and the method of rolling or number of layers could be established. Only the water-permeability depended on the method of filling and rolling of the terrace (table 2). There are four tables.

Card 1/1

TIZDEL', R.R., inzh.; SHMAKOV, M.I., inzh.

Experimental rolling of stony soils. Gidr.stroi. 28 no.1:26-
29 Ja '59. (MIRA 12:2)

(Soil stabilization)

SHMAKOV, M.I.

Work of the Maksathikha Rural District Hospital according to the
new organizational framework. Zdrav.Ros.Feder. 4 no.2:16-19 F '60.
(MIRA 13:5)

1. Glavnyy vrach Maksatikhinskogo rayona Kalininskoy oblasti.
(MAKSATHIKHA DISTRICT--HOSPITALS, RURAL)

SHMAKOV, M.I., inzh.; POPOVA, A.N., inzh.

Study of the foundation of concrete structures of the Saratov
Hydroelectric Power Station by the displacement of large stamps.
Gidr. stroi. 33 no.11:25-27 N '62. (MIRA 16:1)
(Saratov Hydroelectric Power Station--Soil mechanics)

TEREKHOV, I.N., kand.tekhn.nauk, dotsent, kapitan 1 ranga; SMIRNOVSKIY, A.F., inzh.-kapitan, red.; MERKIN, D.B., kand.fiz.-matem.nauk, starshiy nauchnyy sotrudnik, red.; SHMAKOV, N.A., kapitan-leytenant, red.; BERDNIKOVA, Ye.B., tekhn.red.

[Brief course in radio deviation] Kratkii kurs radiodeviatsii.
Moskva, Voen.izd-vo M-va vooruzhennykh sil SSSR, 1947. 85 p.
(MIRA 14:1)

1. NIGShI voyenno-morskikh sil (for Terekhov).
(Radio in navigation)

SHMAKOV, N.A.

The AZ-1 automatic machine for rolling in and hardening push-rods ends.
Biul.tekh.-ekon.inform. no.5;17-18 no.5:60. (MIRA 14:3)
(Machine tools)

SHMAKOV, N.G., starshiy inzh.

Setting-up of a graph for determining the location of the damage
in electric lines. Avtom., telem. i sviaz' 5 no.6:40-41 Je '61.
(MIRA 14:9)

1. Kontrol'no-ispytatel'nyy punkt Ruzhinskoy distantsii
signalizatsii i svyazi Dal'nevostochnoy dorogi.
(Electric lines--Testing) (Electric measurements)

SHIVAKOV, E. I. (Chief)

"Conference of veterinary specialists of Kalinin oblast.

SC: Veterinariia 29 (1), 1952, p. 61

Veterinary Dept., Kalinin Oblast Admin. of Agri.

SHMAKOV, N.P.

Raise the level of veterinary work in Kalinin Province. Veterinariia
32 no.10:12-17 0 '55. (MLRA 8:12)

1. Nachal'nik veterinarnogo otdela Kalininskogo oblastnogo upravleniya
sel'skogo khozyaystva.
(KALININ PROVINCE--VETERINARY MEDICINE)

SHMAKOV, N.P.

Socialist competition is a certain way towards an expansion of stockbreeding. Veterinariia 34 no.1:14-19 Ja '57. (MLRA 10:2)

1. Nachal'nik veterinarnogo otdela Kalininskogo oblastnogo upravleniya sel'skogo khozyaystva.
(Stock and stockbreeding)

СЕМЕНОВ Н. П. (Kalinin Scientific-Production Veterinary Laboratory)

"Work of a veterinary feldsher (medical assistant) at the
kolkhoz."

Veterinariya, Vo. 38, No. 12, December 1961, P. 10.

SHMAKOV, N. V.

Effect of some fodders on percentage of milk. N. V. Shmakov and A. G. Shmakova. *Zhivotnovodstvo* 1954, 100-4; *Dairy Sci. Abstr.* 17, 203(1955).—A brief account is given of a series of expts. with 10-16 cows in their 3rd-5th months of lactation. Feeding 3 kg. sunflower cake/head daily to cows receiving grass as basic fodder resulted in a 0.47% increase in the fat content of the milk. The effects of oatmeal and cottonseed cake were less pronounced. Of the bulk fodders investigated, potatoes were the most effective followed by silage (grass and kale), fodder beet, and turnip in descending order. K. L. C.

2

USSR/Farm Animals - Large Horned Cattle.

C-2

Abs Jour : Ref Zhur - Biol., No 18, 1958, 83371

Author : Shirakov, M.V.

Inst : Leningrad Oblast' Agricultural Station.

Title : Economic Effectiveness of Various Systems in Summer Keeping of Dairy Cattle.

Orig Pub : Sb. tr. Leningr. obl. s.-kh. st., 1956, No 24, 208-219.

Abstract : At the Leningrad Oblast' Agricultural Station experiments were performed comparatively evaluating keeping procedures of dairy cattle during the summer: namely, keeping in stalls only without pasture, camp-pasture keeping with additional feedings of green substances in stalls according to needs, and finally, pasture keeping on natural pastures. In terms of the cows' increased milk yields, as well as their live weights, best results were

Card 1/2

SHMAKOV, N.V., elektromekhanik

Correction of faults in the operation of an IT-81 relay caused
by vibration of the panel. Energetik 10 no.6:23-24 Je '62.

(MIRA 16:3)

(Electric switchgear)

(Electric relays)

VORONOV, I.S., gornyy inzh.; KOVALENKO, V.A., gornyy inzh.; BEKETOV,
P.Ye., gornyy inzh.; MATVEYEV, V.P., gornyy inzh.; NAGAYEV,
Kh.Kh., gornyy inzh.; SHMAKOV, P.I., gornyy inzh.; CHERKAYEVA,
N.G., gornyy inzh.

Conveying and loading ore with a vibrating feeder. Gor.
zhur. no.8:28-31 Ag '64. (MIRA 17:10)

SHMAKOV, P. V.

Radio Through Cables, Moscow, 1927.

SHMAKOV, Pavel Vasil'yevich

"Several Photoelectrical Properties of Induction Cathodes, Zhur. Tekh. Fiz.,
vol. 6, no. 7, 1936.

GINAKOV, P. V.

Dr. Technical Sci. "When Will the Museum of Communications in. A. S. Popov Open?,"
Radio, No. 4, 1948; "Progress of Soviet Television, "Radiotekh., No. 1, 1948; -EE-2
Dr. Tech. Sci. "Color Television," Moscow-Leningrad, 1948. -EE-2

The path of Soviet Television Development (Puti razvitiya sovetskogo televideniya),
Shrakov, Leningrad Branch, All-Union Society for the Advancement of Political and
Scientific Knowledge, 38 pp, one ruble, published in 1949.

SINAI, . . .

52/49T1

USSR/Academy of Sciences

May/Jun 49

"New Books" 1 p

"Radiotekh" Vol IV, No 3

Lists five books: P. V. Shmakov's "Color Televi-
sion," M. V. Belyakov's "The Influence of Meteoro-
logical Conditions on the Propagation of Ultrashort
Waves," G. A. Remez's "Radio Testing," G. Khol'man's
"Generation and Amplification of Decimeter and Cen-
timeter Waves," and N. P. Bogoroditskiy and I. D.
Fridberg's "High-Frequency Inorganic Dielectrics."

52/49T1

SHMAKOV, P. V.

Shmakov, P. V. - "Qualitative characteristics of colored television systems,"
Sbornik trudov Leningr. elektrotekhn.in-ta svyazi im. Bonch-Bruyevicha, Issue 5,
1949, p. 3-24

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

1. SHIMAKOV, P. V. Prof.
2. USSR (600)
4. Television Broadcasting
7. Problem of long-distance television transmission. Radio no. 11, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

CHIRKOV, I.

"Questions of Long-Distance Television Transmission.(Tr. from the Russian)." p. 412
(KOZLEKEDESTUDOMANYI SZEMLE, Vol. 3, no. 11/12, Nov./Dec. 1953, Budapest, Hungary)

SO: Monthly List of East European Accessions, LC, Vol. 3, No. 5, May 1954/Unclassified

SHMAKOV, P., professor, zasluzhennyy deyatel' nauki i tekhniki, doktor
tekhnicheskikh nauk; BOGORODITSKIY, N., professor, laureat Stalinskoy
premi, doktor tekhnicheskikh nauk; BOGINSKIY, V., kandidat tekhnicheskikh nauk.

Supplying workers of village radio rediffusion centers with more
literature. Radio no.12:13 D '53. (MLRA 6:12)
(Radio--Receivers and reception)

SHMAKOV, P. V.

PHASE X

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 614 - X

BOOK

Call No.: AF648072

Author: SHMAKOV, P. V., Prof.

Full Title: DEVELOPMENT TRENDS IN COLOR AND BINOCULAR TELEVISION
(Stenograph of a public lecture delivered in Moscow)

Transliterated Title: Puti razvitiya tsvetnogo i ob'yemnogo
televideniya

PUBLISHING DATA

Originating Agency: All-Union Society for the Propagation of
Political and Scientific Learning

Publishing House: "Znaniye"

Date: 1954

No. pp.: 38

No. of copies: 83,000

Editorial Staff: None

PURPOSE AND EVALUATION: This pamphlet is one of popular booklets
(series IV, no. 28) published by the All-Union Society for the
Propagation of Political and Scientific Learning. It is written
for wide circles of readers and presents information which does
not exceed in quantity that usually given in similar American
"popular" publications. In the introduction, the author exag-
gerates the role of Russian and Soviet scientists and engineers
in the field of television science.

1/3

Puti razvitiya tsvetnogo i ob'yemnogo televideniya	AID 614 - X
Simultaneous systems of color transmission	Pages
Field sequential systems of color transmission	10-13
Special features of television transmission of colored details of the picture	13-15
Simultaneous system of color television with standard frequency band	15-18
Binocular Television	18-23
Methods of television transmission of three-dimensional pictures	23-36
System of binocular television with standard frequency band	23-33
Conclusion	34-36
References	36-37
	38

No. of References: 7 Russian (1949-1954)

Facilities: In addition to the names of the older generation Russian scientists, the author gives the following names of Soviet scientists: in the field of radio engineering M. A. Bonch-Bruyevich, M. V. Shuleykin, L. I. Mandel'shtam, N. D. Papaleksi and A. A. Andronov; in the development of color television, I. A. Adamian, N. T. and V. I. Fedorov and Yu. S. Volkov; in binocular television, S. P. Ivanov and the Chair of Television of the Leningrad Institute of Electric Communication.

3/3

SHMAKOV, P.V.

FUNDAMENTALS OF COLOR AND THREE-DIMENSIONAL TELEVISION, Izd. "Sovetskoye radio", M., 1954, 303 pages.

The first part of the book presents and exposition of the physical foundations of color television and of color calculations in color television system; the author gives a classification of such systems and the basic principles of their construction, as well as a description of tubes for color television.

In the second part, devoted to three-dimensional (stereoscopic) television, the author discusses the necessary conditions for the three-dimensional reproduction of images, and also systems for realizing three-dimensional reproduction. The concluding chapter is devoted to the question of three-dimensional color television.

~~SHMAKOV~~ P.V., professor, doktor tekhnicheskikh, nauk, zasluzhennyy
deyatel' nauki i tekhniki, redaktor; LUR'YE, O.B., doktor
tekhnicheskikh nauk, redaktor; ROGINSKIY, V.Yu., kandidat
tekhnicheskikh nauk, dotsent, redaktor; BCGDANOV, A.V., inzhener,
redaktor; CHERNYSHEV, V.M., inzhener; redaktor.

[Collection of articles on television broadcasting] Sbornik
materialov po televizionnomu veshchaniyu. Leningrad, 1956. 211 p.
(MLRA 10:6)

1. Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektro-
svyazi imeni A.S.Popova. Leningradskoye, Ukrainskoye i Latviyskoye
pravleniye.

(Television--Transmitters and transmission)

SHMAKOV, P.V.

SHMAKOV, P.V., otvetstvennyy redaktor; ANDREYENKO, Z.D., redaktor;
VEYNTRAUB, A.B., tekhnicheskiiy redaktor

[Color television; a collection of instructions] TSvetnoe televidenie;
informatsionnyi sbornik. Moskva, Gos.izd-vo lit-ry po voprosam
svyazi i radio, 1957. 121 p. (MLRA 10:9)
(Color television)

PSURTSEV, N.; SHOKIN, A.; KOTEL'NIKOV, V., akademik; SHMAKOV, P., zaslu-
zhennyy deyatel' nauki, professor.

Scientists and radio specialists answer editor's questions. Radio
no.1:6-7 Ja '57. (MLRA 10:2)

1. Ministr svyazi SSSR (for Psurtsev). 2. Pervyy zamestitel' mini-
stra radiotekhnicheskoy promyshlennosti SSSR (for Shokin). 3. Di-
rektor Instituta radiotekhniki i elektroniki AN SSSR (for Kotel'-
nikov).

(Radio)

VRASKIY, S.B.; SHMAKOV, P.V., prof., otv.red.; GAL'CHINSKAYA, V.V.,
tekhn.red.

[Fundamentals of colorimetry; textbook for a television course]
Osnovy kolorimetrii; uchebnoe posobie po kursu televideniia.
Pod red. P.V.Shmakova. Leningrad, Leningr.elektrotekhn.in-t
sviazi, 1959. 59 p. (MIRA 13:10)
(Color television) (Colorimetry)

KUSHNIR, F.V., ovt.red.; GAVRILOV, A.F., zasluzhennyy deyatel' nauki i tekhniki, prof., red.; DOLUKHANOV, M.P., prof., red.; YEGOROV, K.P., dots., red.; ZHDANOV, I.M., prof., red.; ZELYAKH, E.V., prof., red.; ZELIGER, N.B., prof., red.; LEBEDEV, K.N., dots., red.; ODNOL'KO, V.V., dots., red.; ROMANOVSKIY, V.B. [deceased], dots., red.; FOMICHEV, I.N., dots., red.; SHINIBEROV, P.Ya., dots., red.; SHMAKOV, P.V., zasluzhennyy deyatel' nauki i tekhniki prof., red.; GAL'CHINSKAYA, V.V., tekhn.red.

[Structure and reactivity of organic compounds] Voprosy stroeniya i reaktsionnoi sposobnosti organicheskikh soedinenii. Leningrad, 1959. 372 p. (Leningrad. Elektrotekhnicheskii institut svyazi. Trudy, no.8). (MIRA 13:11)

(Chemistry, Organic)

(Chemical structure)

6(6)

06427
SOV/107-59-5-22/51

AUTHOR: Shmakov, P., Professor

TITLE: On the Selection of a Color TV Broadcasting System

PERIODICAL: Radio, 1959, Nr 5, pp 22 - 24 (USSR)

ABSTRACT: The author reviews the development of color TV in the USSR and abroad. In 1953, the Kafedra televideniya Leningradskogo elektrotekhnicheskogo instituta svyazi imeni professora M.A. Bonch-Bruyevicha (Chair of Television of the Leningrad Electrical Engineering Institute of Communications imeni Professor M.A. Bonch-Bruyevich) - LEIS - began the development of the simultaneous compatible color TV system. In 1954, publications on the simultaneous compatible color system were found in American periodicals. Although there were no circuit diagrams, the task of the Soviet scientists was made easier, since the circuits were based on the quadrature modulation which was known to them from their previous work. The author further states that the compatible color TV system used in

Card 1/2

06427

SOV/107-59-5-22/51

On the Selection of a Color TV Broadcasting System

the USA and, for experimental purposes, in the USSR, is the most advanced one. The author mentions briefly the flying spot studio camera and a motion picture projector developed by LEIS. Figure 1 shows a photograph of the camera, while the block diagram is shown in Figure 2. The Television Department at LEIS is working on problems connected with the exchange of color TV programs with countries having another color TV system. The author mentions the development of color TV systems in France and in Holland. There are 2 photographs, 1 block diagram, 1 diagram and 8 Soviet references.

Card 2/2

AKSENTOV, Yu.V.; VEREVKIN, N.S.; ZHEBEL', B.G.; ZLOTNIKOV, S.A.;
KOLIN, K.T.; KONDRAT'YEV, A.G.; MINENKO, Yu.G.; ODNOL'KO,
V.V.; TARANETS, D.A.; SHMAKOV, P.V., red.; VENGRENYUK, L.I.,
red.; KARABILOVA, S.F., tekhn.red.

[Television; general course] Televidenie; obshchii kurs. Pod
red. P.V.Shmakova. Moskva, Gos.izd-vo lit-ry po voprosam svyazi
i radio, 1960. 391 p. (MIRA 13:12)
(Television)

SHMAKOV, Pavel Vasil'yevich, prof., zaslužennyy deyatel' nauki i
tekhniki

Television of the future. Izobr.i rats. no.1:21-23 Ja '60.
_____(MIRA 13:4)

1. Nauchnyy rukovoditel' kafedry televideniya Leningradskogo
elektrotekhnicheskogo instituta svyazi imeni Bonch-Bruyevicha.
(Television)

88152

S/187/60/000/004/001/002
A189/A026

9.9884

AUTHOR: Shmakov, P.V.

TITLE: On the Employment of Earth Satellites for Television

PERIODICAL: Tekhnika kino i televideniya, 1960, No. 4, pp. 3 - 7

TEXT: The author reviews some papers dealing with the problem of using man-made satellites for television broadcasting and discusses the problem from the viewpoint of the current achievements in rocket engineering and radioelectronics. The TV transmission can be achieved by launching a satellite into a 24-h circular orbit, 35,800 km high. The program broadcast from the satellite would cover an area of 230,000,000 km², which corresponds to the 160° arc of the globe. Figure 1 is a graph showing the relationship between the orbit height (h) and the rotation period (T) of the satellite. The graph was plotted according to the formula: $h = f(T)$. Figure 2 shows that part of the globe which would be covered by the TV broadcast if the satellite were launched in the region of Ceylon. The TV broadcast for the entire globe, with the exception of small areas at the northern and southern poles, can be achieved with the use of 3 satellites launched into a 24-h orbit as shown in Figure 3. There are 3 figures, 1 table and 7 references: 3 Soviet, 3 English and 1 Hungarian.

~~Card 1/3~~

27151

S/187/60/000/008/003/004
D053/D113

6.6000

AUTHORS: Shmakov, P.V., and Dzhakoniya, V.Ye.

TITLE: Color stereotelevision

PERIODICAL: Tekhnika kino i televideniya, no. 8, 1960, 30-40

TEXT: The ways of solving the problem of color stereotelevision are discussed. A system of color stereotelevision can be created either by a mechanical coupling of any color television (TV) system or by designing an entirely new system based on the properties of binocular vision. Color TV signals of the stereo image can be produced by (1) a combined operation of two color TV cameras; (2) a single three-tube camera with a special stereoc adapter with, or without, an obturator; (3) two cameras of the sequential color TV system; and (4) a flying spot camera with two alternately operating scanning tubes. The signal transmission of the stereopairs obtained can be accomplished by means of the following color stereotelevision systems: (1) simultaneous color and picture system occupying six channels;

Card 1/2

Color stereotelevision

27151

S/187/60/000/008/003/004
D053/D113

(2) simultaneous picture and sequential color system; (3) simultaneous color and sequential picture system; (4) sequential color and picture system; (5) two-color stereo system; and (6) binocular color mixing system. The principle of operation of the last system is based on the phenomenon of binocular color mixing. There are 18 figures and 6 Soviet references. 41

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut svyazi imeni M.A. Bonch-Bruyevicha (Leningrad Electrotechnical Institute of Communications im. Bonch-Bruyevich).

Card 2/2

ZHEBEL', Boris Georgiyevich; SHMAKOV, P.V., ~~doktor~~ tekhn. nauk,
nauchnyy red.; VOROB'YEV, G.S., red. 12d-va; GURDZHIYEVA,
A.M., tekhn. red.

[Color television] TSvetnoe televidenie. Leningrad, Ob-vo
po rasprostraneniu polit. i nauchn. znaniy, 1961. 62 p.
(MIRA 15:4)

(Color television)

28459

S/019/61/000/015/016/101

A154/A126

6.1370

AUTHORS: Gol'din, A.A.; Shmakov, P.V.

TITLE: An electronic method of printing combined frames

PERIODICAL: Byulleten' izobreteniy, no. 15, 1961, 23

TEXT: Class 21a¹, 34²². No. 140094 (683826/26 of October 31, 1960). An electronic method of printing combined frames, distinguished by the fact, that, in order to improve the quality and simplify the printing process, the method uses an electron-beam tube which creates a luminous flux with two different spectral components, one of which is used to analyze the image as it is being reprinted on-to another film, and the other one to print this image. X

Card 1/1

AKSENTOV, Yu.V.; GOL'DIN, A.A.; DZHAKONIYA, V.Ye.; DUSHKEVICH, N.I.;
YERGANZHIYEV, N.A.; YEFIMKIN, V.I.; LIPAY, I.N.; MINENKO, Yu.G.;
ODNOL'KO, V.V.; PEREVEZENTSEV, L.T.; TARANETS, D.A.; SHMAKOV,
P.V., prof.; KUKOLEVA, T.V., red.; BELYAYEVA, V.V., tekhn. red.

[Theory and practice of color television]Teoriia i praktika
tsvetnogo televideniia. Moskva, Sovetskoe radio, 1962. 661 p.
(MIRA 16:1)

(Color television)

VEREVKIN, N.S.; SHMAKOV, P.V., red.; GAL'CHINSKAYA, V.V., tekhn.
red.

[Tubes for converting electrical information to video
signals; manual for a course in television] Trubki dlia
preobrazovaniia elektricheskoi informatsii v videosignal;
uchebnoe posobie po kursu televideniia. Leningrad, LEIS.
No.6. 1961. 35 p. (MIRA 17:3)

L 20419-66 EMT(1)/1 WR
ACC NR: AP6009841

SOURCE CODE: UR/0413/66/000/004/0034/0034

INVENTOR: Korotkov, V. P.; Shmakov, V. A.; Shevchenko, B. N.

ORG: none

TITLE: Device for conversion, normalization, and integration of antenna radiation patterns. Class 21, No. 178869

SOURCE: ^{25B, #} Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 34

TOPIC TAGS: mechanical motion instrument, antenna radiation pattern, antenna engineering

ABSTRACT: A mechanical device is introduced for conversion, normalization, and integration of antenna radiation patterns (see Fig.1). To increase the operating

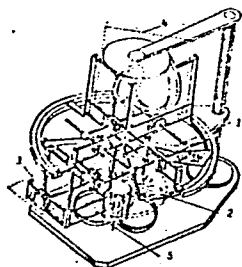


Fig. 1. Device for conversion, integration, and normalization of radiation patterns

- 1 - Steel template; 2 - rod;
- 3 - multiplication mechanism;
- 4 - friction planimeter; 5 - cam.

Card 1/2

UDC: 621.317.619

L 20419-66

ACC NR: AP6009841

efficiency, the device includes a flexible steel template which tracks the amplitude characteristic, a rotatable rod for multiplication of signal strength by a constant quantity, a mechanism for multiplication of signal strength by the sine of the polar angle, a friction planimeter, and a cam whose profile follows the modulus of a sinusoid. Orig. art. has: 1 figure.

[BD]

SUB CODE: 09/ SUBM DATE: 23Jan65/ ATD PRESS: 4222

Card 2/2 ULR

L 04273-67

ACC NR: AP6013295

SOURCE CODE: UR/0413/66/000/008/0090/0090

AUTHORS: Korotkov, V. P.; Nikol'skiy, A. A.; Shmakov, V. A. 32
10

ORG: none

TITLE: A method for inspecting the internal surface of spherical details. Class 42, No. 180829

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 90

TOPIC TAGS: surface geometry, ~~surface roughness~~, SPHERIC SHELL STRUCTURE, OPTIC METHOD.

ABSTRACT: This Author Certificate presents a method for inspecting the internal surface of spherical details by the deflection of the constant level line from the standard value. To inspect details of complex shape, the lines of constant level are obtained by cutting the inspected detail by a layer of low reflection liquid. The level of the liquid is then changed by a desired amount, and the line is photographed on the same colored film with the use of interchangeable color filters.

SUB CODE: 20/ SUBM DATE: 19Oct64

Card 1/1

UDC: 778.6:531.717.7

1.2300

89667

S/135/61/000/003/003/014

A006/A001

AUTHORS: Alov, A. A., Professor, Doctor of Technical Sciences, Bobrov, G. V.,
Candidate of Technical Sciences, Shmakov, V. M., Engineer

TITLE: On the Nature of Gas Pore Nucleation in Weld Joints

PERIODICAL: Svaroshnoye proizvodstvo, 1961, No. 3, pp 9-10

TEXT: The nucleation and development of pores in weld joints proceeds during crystallization of the metal and is connected with the formation of gases in the metals or with their liberation out of the solution. The development of gas pores starts with the appearance of microscopic nuclei in the liquid metal. In low carbon "rimming" steel, a higher degree of oversaturation of carbon and ferrous oxides is developing during crystallization, entailing the reaction $C + FeO = Fe + CO$. The carbon monoxide which is not soluble in the steel forms the micro-bubble nucleus. Hydrogen plays an important part in the formation of pores in welds. The authors investigated peculiarities of hydrogen occurrence in metals which show that certain energetic conditions, such as high oversaturation, are required for the liberation of hydrogen and the formation of microbubbles during solidification of the metal. However, if there are flaws in the metal,

Card 1/4

89667

On the Nature of Gas Pore Nucleation in Weld Joints

S/135/61/000/003/003/014
A006/A001

the hydrogen may penetrate into the metal by diffusion and convert into the molecular form. The partial pressure of hydrogen in the flaw will be determined by external conditions, temperature and hydrogen concentration in the metal. To check the regularities in the development of pores, due to flaws in the base metal, special tests were performed. At the edges of aluminum, AMr6 (AMg6) and EI435 (EI435) alloy plates, thin channels were drilled. Aluminum and AMg6 plates were rolled so that the channels were tightly pressed together. In the EI435 plates the channels were compressed by local deformation. The experimental plates were butt welded in argon with consumable electrodes of an analogous metal. In all cases the flaws caused pore formation. During the crystallization of liquid metal, shrinkage takes place. If pure metals or alloys with a narrow temperature range of crystallization, are crystallizing, concentrated shrinkage cavities are mainly formed in the ingot. At a larger crystallization range, dispersed internal dendritic and interdendritic shrinkage porosity will mainly develop. (Ref. 4). The relatively high crystallization rate of the metal during welding and the development of dendrites from the surface of partially fused grains, entail the intensified growth of axes of the first order. Therefore metal crystallization in the interdendritic spaces is retarded. Metal shrinkage in these spots will be impeded by the dendrites. Evidently, microscopic cavities may form between the dendrites, the more at a larger crystallization range of the

Card 2/4

On the Nature of Gas Pore Nucleation in Weld Joints

89667
S/135/61/000/003/003/014
A006/A001

alloy. The microcavities are filled with dissolved metal vapors or gases. Partially, hydrogen will diffuse in the cavities, converting into the molecular form. The development of micropores into visible pores depends in the first place on the hydrogen concentration in the surrounding metal and the partial pressure of hydrogen in the pore. When welding aluminum, the partial hydrogen pressure in the bubble during its formation is close to 1 atm. It can be assumed that only at a hydrogen concentration in aluminum over $0.036 \text{ cm}^3/100 \text{ g}$, the microcavities can develop into visible pores. An editorial note says that these data are different from those given by G. D. Nikiforov and A. G. Makhortova ($0.69 \text{ cm}^3/100\text{g}$) which seem to be more correct. Most favorable conditions for the development of microcavities are in the mutual crystallization range, since the dendrite growth - axes of the first order - in these areas is most rapid. As a rule the nucleation of pores occurs in these very spots (Fig. 7). Finally the authors draw the following conclusions: The development of gas pores in welds starts from micronuclei, originating as a result of a) reactions with the formation of gases which are insoluble in the metal b) inter-dendritic and internal dendritic metal shrinkage. When welding steels micro-nuclei may arise as a result of the burning out of carbon, and of the metal shrinkage during crystallization as well. In the case when a reaction with the formation of insoluble gases does not take place during

Card 3/4

On the Nature of Gas Pore Nucleation in Weld Joints

89667
S/135/61/000/003/003/014
A006/A001

crystallization, micronuclei can only arise as a result of metal shrinkage.

Figure 7:

Development of pores from shrinkage micro-flaws.
There are 8 figures and 4 Soviet references.

ASSOCIATION: MATI



Card 4/4

34852

S/135/62/000/003/004/00.
A006/A101

1.2300
A100000

Alov, A. A., Professor, Doctor of Technical Sciences, Shmakov, V. M.
Engineer

TITLE: Argon-arc welding with additional argon flow

PERIODICAL: Svarochnoye proizvodstvo, no. 3, 1962, 13 - 15

TEXT: To increase the fusion depth of the base metal in gas-shielded welding, a method was developed using an additional argon flow. A special torch was designed which was equipped with a special nozzle for additional argon supply. The authors studied the effect of the additional gas consumption on the fusion depth by building-up aluminum wire on a 15 mm thick aluminum plate in argon atmosphere on d-c of reverse polarity. The increased fusion depth is caused by the additional pressure of the secondary argon flow on the molten metal pool, promoting its displacement. The arc heat is transferred to the base metal directly and not through a molten metal layer as in welding without an additional gas flow. The use of the secondary argon flow makes it possible to increase the fusion depth of the base metal and to raise the efficiency of using the arc heat. The fusion depth of the base metal increases with a higher consumption of the

Card 1/2

X

Argon-arc welding with additional argon flow

S/135/62/000/003/004/002
A006/A101

additional argon flow until a certain limit. The optimum consumption of an additional argon flow is 16 - 22 l/min for welding aluminum with a 2 - 3 mm diameter wire and 200 - 250 amps current. There are 6 tables, 7 figures and 2 Soviet-style references.

ABSTRACTION MAIL

Card 2/2

X

SHMAKOV, V.M.; KOMLEV, A.M.

Hydrography of Western Siberia. Izv. SO AN SSSR no.2 Ser. tekhn.
nauk no.1:127-128 '63. (MIRA 16:8)

(Siberia, Western—Hydrography)

MEZENTSEV, V.S.; SHMAKOV, V.M.

"Classification of rivers and the hydrological regionalization
of the U.S.S.R." by P.S. Kuzin. Reviewed by V.Z. Mezentsev,
V.M. Shmakov. Izv. Omsk. otd. Geog. ob-va no.5:201-203 '63.
(MIRA 17:5)

BEYROM, S.G., kand. geologo-mineralogicheskikh nauk; KOMLEV, A.M., kand.
geograficheskikh nauk; SUMAKOV, V.M., kand. tekhn. nauk

Reviews and bibliography. Meteor. i gidrol. no.7:59-60 J1 '65.
(MIRA 18:6)

L 14505-66 EWT(m)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b) MJW/JD/HM

ACC NR: AP6003279 (N) SOURCE CODE: UR/0135/66/000/001/0007/0009

AUTHOR: Shmakov, V. M. (Candidate of technical sciences); Izmirliyeva, A. N. (Engineer)

ORG: none

TITLE: Diffusion welding of titanium alloys with bronze

SOURCE: Svarochnoye proizvodstvo, no. 1, 1966, 7-9

TOPIC TAGS: diffusion welding, titanium alloy, bronze, welding technology, vacuum welding, crystal structure, metal stress

ABSTRACT: The authors experimented with the vacuum diffusion welding of OT4, VT14 and VT15 Ti alloys with Br.Kh0.8 bronze. The alloys OT4 and VT14 have an $\alpha + \beta$ structure, whereas the alloy VT15 has a β -structure. To obtain welded Ti-bronze joints of satisfactory strength and plasticity despite the heterogeneity of the structure and properties of these metals, it is advisable to employ a weld insert of a metal with a crystal lattice similar to the crystal lattices of the metals being welded yet forming no chemical compounds with these metals. In this case, Mo or Nb, both of which form a continuous series of solid solutions with Ti, may be recommended. Accordingly, the authors used a 0.1 mm thick Nb foil as the weld insert to weld together Ti-alloy and bronze specimens 15 mm in diameter and 30 mm in length. The specimens were as-

Card 1/3

UDC: 621.791.532.72:669.295.5:669.35.6

L 14505-66

ACC NR: AP6003279

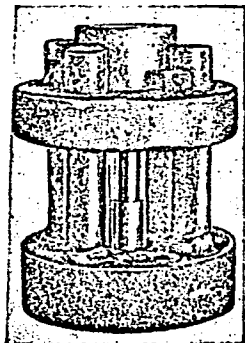


Fig. 1. Strap for assembling the specimens

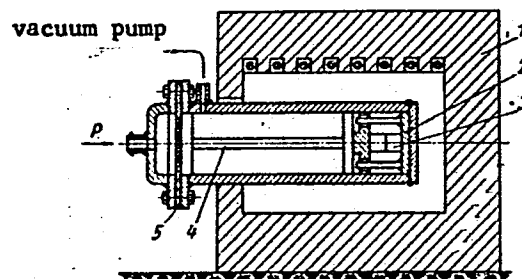


Fig. 2. Diagram of diffusion welding in box furnace

1 - furnace body; 2 - welding strap;
3 - specimen; 4 - bar; 5 - diaphragm

Card 2/3

L 14505-66

ACC NR: AP6003279

sembled in a strap (Fig. 1) and placed in an evacuated ($4 \cdot 10^{-2}$ mm Hg) container which was heated in a box furnace. During heating the specimens were subjected to the stress created by the difference in pressure above and below the rubber diaphragm minus the force of friction of the rod against the container (Fig. 2). By increasing (above atmospheric) the pressure in the chamber above the diaphragm pressure, the pressure exerted on the surfaces being joined may be varied within broad limits. Findings: maximum strength ($27-29 \text{ kg/mm}^2$) of the welded joints is attained after 5 hr at $960-980^\circ\text{C}$ in the presence of a unit pressure of $0.2-0.35 \text{ kg/mm}^2$ for the joining of specimens with polished surfaces. The study established that the optimal and most stable results of vacuum diffusion welding are produced when the surfaces to be joined are polished. Orig. art. has: 2 tables, 5 figures.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 000

PC

Card 3/3

SHMAKOV, V. N.

USSR/ Meteorology - Hail

Card 1/1 Pub. 96 - 27/36

Authors : Shmakov, V. N., and Khrgian, A. Kh., Prof.

Title : A rare case of hail

Periodical : Priroda 2, 116-117, Feb 1954

Abstract : Two rare case of hailing (July 5, 1953) with hailstones weighing
from 15-75 g are reported. Drawings.

Institution :

Submitted :

ABRAMOV, A.G., inzhener; SHMAKOV, V.N., inzhener.

- : Inductive self-regulating starting rheostat for asynchronous motors with wound rotor. Energetik 4 no.7:23-25 J1 '56. (MLRA 9:9)
(Electric motors--Starting devices)

15(6)

SOV/72-59-2-13/21

AUTHORS:

Kaplan. A. Yu., Abramov, A. G., Shmakov, V. N.

TITLE:

Three-Phase Induction Continuous-Operation Furnace for the Annealing of Glass Products (Induktsionnaya trekhfaznaya konveyernaya pech' dlya otzhiga steklyannykh izdeliy)

PERIODICAL:

Steklo i keramika, 1959, Nr 2, pp 39-40 (USSR)

ABSTRACT:

Muffle furnaces of the LN 1000 x 18 type, that are heated by liquid or gaseous fuels, present various deficiencies in the annealing process of glass products. For this reason the bottle factory Konstantinovka and the glass works Krasnodar introduced electric heating, carried out by means of heating elements in the hearth or in the lower muffle channel. However, deficiencies were found here as well. The authors of the present paper developed and tested the three-phase induction continuous operation furnace (see Figure). The furnace features a body at the top, consisting of welded 8 mm-thick steel sheet. The body has a heat insulator topped by a 35 mm² cross section copper wire winding. The winding is three-phase for 380 V and 50 cycles. The connection scheme is shown in the figure. The body is heated by eddy currents forming in the magnetic field.

Card 1/2

SOV/72-59-2-13/21

Three-Phase Induction Continuous-Operation Furnace for the Annealing of Glass Products

Glass bottles of a 0.5 l content are conveyed in the annealing tunnel by means of a net assembly line. The existing LN 1000 × 18 continuous operation furnaces can be easily and cheaply adapted to the induction heating system. Annealing costs of 1 t 1/2-liter bottles are lower by 25% with induction heating as compared with natural gas heating. Furthermore the waste percentage is considerably lower. Conclusions: Induction furnaces guarantee the required annealing conditions. The furnace temperature can be controlled in a simple manner. Heat consumption as referred to a production unit is lower. Working safety is higher and repairing costs are lower. Factory overall working conditions are improved. There is 1 figure.

ASSOCIATION: Krasnodarskiy stekol'nyy zavod (Krasnodar Glass Works)

Card 2/2

SHUL'TS, Ya.I.; SHMAKOV, V.N.

First experience in the use of the controlled directional sensitivity method in the Southern Urals. Trudy MINKHGP no. 50:132-137
'64 (MIRA 18:2)

SHMAKOV, V.N.; PAVLOVA, I.S.

Significance of the method of isolated contrasting of the duodenum and induced hypotonia in the diagnosis of duodenitis. Vest. rent. i rad. 39 no.5:33-37 S-0 '64. (MIRA 18:3)

1. 1-ya kafedra fakul'tetskoy terapii (zav. - prof. A.Ya. Gubergrits)
i kafedra rentgenologii i meditsinskoy radiologii (zav. I.A. Kunin)
Donetskogo meditsinskogo instituta.

ACCESSION NR: AP4018440

S/0179/64/000/001/0170/0173

AUTHOR: Shmakov, V. P. (Moscow)

TITLE: Equations for the axisymmetrical vibration of a liquid-filled cylindrical shell

SOURCE: AN SSSR. Izv. Otd. tekhn. nauk. Mekhanika i mashinostroyeniye, no. 1, 1964, 170-173

TOPIC TAGS: cylindrical shell, thin walled shell, liquid filled shell, partly filled cylindrical shell, axisymmetrical shell, fluid mechanics, shell vibration, filled shell

ABSTRACT: A thin-walled cylindrical shell with its longitudinal axis oriented in the direction of the field of mass forces is discussed. An elastic diaphragm in the form of a shallow spherical segment, placed at the lower end of the shell, serves as a bottom. The liquid partly fills the shell. It is assumed that the elastic deformation of the shell and the displacements and velocities of all particles of the liquid are small, that the initial motion is irrotational and that the field of mass forces has a potential and is directed parallel to the longitudinal axis of the shell. Equations of the perturbed motion of the shell-liquid system, complemented by equations describing the wave motion of the liquid, are reduced by the Bubnov-Galerkin method to an infinite system of regular differential equations, from which expressions for determining the natural frequencies and modes of vibrations of a

Card 1/2

MILOSLAVSKIY, S.L.; SHMAKOV, V.P.

Rapid method of reconstructing blast furnaces. Prom. stroi. 42
no.4:4-11 '65. (MIRA 18:4)

1. Zamestitel' nachal'nika Glavpridneprovstroya (for Miloslavskiy).
2. Glavnyy inzh. tresta "Dzerzhinskstroy" (for Shmakov).

L 00754-67 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k) IJP(c) WW/EM
 ACC NR: AP6024193 SOURCE CODE: UR/0424/66/000/002/0154/0159

AUTHOR: Shmakov, V. P. (Moscow)

ORG: none

TITLE: A method for integrating the equations for axisymmetric vibrations of a spherical shell *~p*

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 2, 1966, 154-159

TOPIC TAGS: spherical shell, shell theory, vibration, Legendre polynomial, ordinary differential equation

ABSTRACT: A method is given for solving the problem of axisymmetric vibrations of spherical shells, described by the equations

$$\frac{1}{L} \frac{dLu}{d\alpha} = -(1-\mu + \lambda^2) \int u d\alpha - (1+\mu)w + c_1$$

$$(\nabla^2 + 2)(\nabla^2 + 1 + \mu)w = \frac{\lambda^2 - (1-\mu^2)}{c^2} w + \frac{1-\mu^2 + \lambda^2(1+\mu)}{c^2} \int u d\alpha - \frac{1+\mu}{c^2} c_1$$

The solution is shown to be analogous to that obtained from the auxiliary equation

$$\nabla^2 w + \nu(\nu+1)w = 0,$$

given by the fast converging series of Legendre polynomials. The analysis is shown

Card 1/2

L 00754-67

ACC NR: AP6024193

to be applicable to arbitrary boundary conditions through tabulated functions which can be obtained to any desired degree of accuracy. Two examples are considered: 1) a spherical shell open at one pole but fixed at the edge $\alpha = \alpha_0$, and 2) a closed spherical shell. The analysis can be extended to the case of asymmetric vibrations with condition of boundedness at the poles. Orig. art. has: 28 equations, 2 figures, and 1 table.

SUB CODE: 20/ SUBM DATE: 02Jul65/ ORIG REF: 004/ OTH REF: 001

Card 2/2 *ldh*

SHMAKOV, V. I.

15
Nylon material for parachutes. I. A. Bramina, A. I.
Avinina, and V. I. Shmakov. U.S.S.R. 105,810,
May 25, 1957. The material is satd. with an aq. emulsion
of paraffin, stearin, NH_4OH , and kerosine. A suitable
emulsion is prepd. from paraffin 70, stearin 20, 25% NH_4OH
20, kerosine 100 g., and water to make 1000 ml. M. H.

42 2c
2 may

PM 103

SHMAKOV, Ye.V., inzh.

Double-strap drawing frames on cotton spinning machines and
ways to improve their performance. Tekst.prom. 19 no.1:65-
69 Ja '59. (MIRA 12:1)
(Spinning machinery) (Cotton spinning)

SHMAKOV, Yu.I. (Kiyev); PASECHNIK, Z.V. [Pasichnyk, Z.V.] (Kiyev)

Approximate formulas for the characteristics of a laminar boundary
layer on an isolated airfoil. Prykl.mekh. 9 no.5:537-543 '63.
(MIRA 16:10)

1. Kiyevskiy gosudarstvennyy universitet.

ACCESSION NR: AP4020375

s/0021/64/000/003/0331/0334

AUTHOR: Shmakov, Yu. I.

TITLE: Determination of profile resistance

SOURCE: AN UkrRSR. Dopovidi, no. 3, 1964, 331-334

TOPIC TAGS: streamline flow, boundary layer, profile resistance, laminar flow, turbulent flow

ABSTRACT: This work presents a derivation, on the basis of one-parameter methods of boundary layer theory, of approximate formulas which permit determining the coefficient of profile resistance. Formulas are proposed which enable certain functions to be readily calculated; in them the values sought are expressed by parameters which determine the geometry of the profile, and this gives the possibility of analyzing C_{xp} . The distribution of the velocity of potential streamlining as determined by calculation is replaced by the experimental near the rear edge. Tabulation of a number of computer-calculated functions considerably simplifies finding C_{xp} and gives an analytical dependence of the latter on the parameters determined by the geometry of the profile. In

Card 1/2

ACCESSION NR: AP4020375

a test, calculated C_{xp} differed from the experimental by 3.5%. Orig. art. has 40 formulas.

ASSOCIATION: Ky*yivs'ky*y dershavny*y universy*tet (Kiev State University)

SUBMITTED: 07May63

DATE ACQ: 27Mar64

ENCL: 00

SUB CODE: AI, PH

NO REF SOV: 005

OTHER: 000

2/2

Card

L 8869-65 EWT(1)/EPA(b)/FCC/FCS(k)/EWA(1) Pd-L/Pi-L AFTC(a)/AFETR/AEDC(a)/
 ASD(f)/ESD(gs)/AFWL/ETD(g) GW S/0198/64/010/005/0558/0564
 ACCESSION NR: AP4046156

AUTHOR: Shmakov, Yu. I. (Kiev)

TITLE: Characteristics of a turbulent boundary layer 10/8

SOURCE: Prikladna mekhanika, v. 10, no. 5, 1964, 558-564

TOPIC TAGS: boundary layer, turbulence

ABSTRACT: On the basis of the single-parameter method of the boundary-layer theory and of the method of computing potential (irrotational) streamline flow as proposed by V. I. Pyatyata, the author has obtained approximation formulas relating the analytical dependence of the characteristics of a turbulent boundary layer on the geometrical parameters of the flow profile of an incompressible liquid. Near the back edge, where the reciprocal effect of the boundary layer upon the outer potential flow is substantial, the velocity distribution is refined on the basis of treating the experimental data for profiles of a number of series, in which treatment the relation of velocity and characteristics of the turbulent boundary layer to geometry of the profile is analytically preserved. Tabulation of the series of functions, obtained by means of an electronic computer, greatly simplifies finding the characteristics of the boundary layer and makes it simple and convenient to analyze the dependence of the boundary layer on the parameters that define the

Card 1/2

L 8869-65

ACCESSION NR: AP4046156

geometry of the profile. These tabulated functions are given in the paper. The author compares the characteristics of the turbulent boundary layer as computed by these approximation formulas with experimental results. Orig. art. has: 2 figures, 2 tables, and 24 formulas.

ASSOCIATION: Ky*yivs'ky*y derzhavny*y universy*tet (Kiev State University)

SUBMITTED: 30Mar63

ENCL: 00

SUB CODE: ME

NO REF SOV: 005

OTHER: 000

Card 2/2

PAL'M, Yu.A., inzh.; TARASOV, V.A., inzh.; SHMAKOV, Yu.M., inzh.

Experimental investigation of stiffener deformations on an
inclined shell of double curvature. Mat. po met. konstr.
no.7:163-176 '62. (MIRA 17:1)

SHMAKOVA, A.

Atomic locomotive. Tekh.mol.24 no.6:8 Ja '56. (MIRA 9:9)
(Atomic locomotives)

SHMAKOVA, A.

An automatic computing station is servicing 14 collective farms.
Tekh.mol. 25 no.8:12-13 Ag '57. (MLRA 10:9)
(Calculating machines)

SOV/29-58-9-7/30

AUTHOR: Shmakova, A.

TITLE: ~~Building Giants for Chemical Production (Stroim gigantov khimii)~~

PERIODICAL: Tekhnika molodezhi, 1958, Nr 9, pp 7 - 11 (USSR)

ABSTRACT: The town Sumgait at the north coast of the Apsheron peninsula, about 40 km from Baku, exists only for 10 years. The plants situated around the town are as new as this settlement: The tube milling plant, the aluminium plant, the plant for synthetic rubber. The senior among these works is the thermal power plant. It was constructed 20 years ago. Youth has responded to a call from the party and built the town and the plants. It gives large contributions towards the development of chemical industry. The plant of synthetic rubber (SK) in Sumgait is one of the many of its kind in the USSR. In 1952 it was the place of the first production of ethyl alcohol from petroleum gases, which was intended for the production of rubber. Since 1957 this alcohol is processed into rubber on the spot.

Card 1/3

Building Giants for Chemical Production

SSR/22-56-9-7/50

S.Markevich, Chief Engineer, stated that in the coming 7 years 4 new types of rubber will be developed. A characteristic feature which is found in Sumgait is represented by the fact that only few of the inhabitants of Sumgait have had no high school training. Among the workers of the "plant of the innovators" ISK many come from technical colleges and universities. Sumgait is under way to become the center of chemical industry in Azerbaydzhan. The Institut neftekhimicheskikh protsessov Akademii nauk Azerbaydzhans'oy SSR (Institute of Chemical Petroleum Processing AS Azerbaydzhan SSR) is to be installed in this town. This year will see the opening of the branch of the Bakinskiy politekhnicheskii Institut (Baku Polytechnical Institute). In May the building and mounting workers of the SK in Sumgait appealed to the young building and mounting workers of the chemical industry to complete the new chemical production installations earlier than the deadline. The youth of Bashkiriya was the first to react. They declared the construction of their chemical works as

Card 2/3

Building Giants for Chemical Production

SOV/29-58.9.7/30

shock work. These plants will only a short time from now produce synthetic rubber, synthetic fibers and synthetics. The gases obtained in petroleum extraction and the by-product gases generated in petroleum processing are used as raw materials in these works as is done in Azerbaydzhan. Three letters of the Komsomol youth workers of the SK, R.Ryabinina, Sergey Sukhotyuk and Arshad Musayev are published in this item. There are 7 figures.

Card 3/3

AUTHOR: Shmakova, A. Special Correspondent of the
Periodical "Tekhnika molodezhi", Kazan' 29-3-22/25

TITLE: We Construct, We Build, We Fly (Konstruiruyem, stroim,
letayem)

PERIODICAL: Tekhnika Molodezhi, 1958, Vol. 26, Nr 3, pp. 31-34 (USSR)

ABSTRACT: This report on the Bureau of Testing and Construction (OKB)
of Students which was founded 2 years ago at the Institute
for Aviation at Kazan', is prefaced by a letter. This letter
is an appeal to all students of the technical universities and
institutes of technology, to found technical clubs, research
laboratories and bureaus of construction at their institutes.
It is published by order of the members of the OKB. It is sign-
ed by the president of the council of OKB, V. Korchagin. The
following are members of the council: V. Chudakov, A. Rovnykh,
V. Platonov, Yu. Denisov, V. Lyubakov, L. Levashov, E. Groys-
man, V. Yumatov, V. Mosin. The OKB was founded in 1954 by M.
Simonov, a student of the institute who passed the final ex-
amination, in collaboration with the students B. Osokin, Yu.
Chernov and others. At the beginning it had the form of a
circle. The young men did not want only to project, but also

Card 1/4

29-3-22/25

We Construct, We Build, We Fly

to design according to the projects and to test the achieved constructions in flight. First a glider was projected. After overcoming many difficulties, the first glider "KAI-6" was finished in 1956. Encouraged by their success, the constructors of the glider resolved to transform the circle into the OKB with which 50 students are working for the time being. A proper glider station was established at a distance of 20 km from Kazan' in summer of the same year under the slogan: No Building Without Flying. In that very summer one of the aircraft works contracted with the institute with respect to the planning of an all-metal glider. The management of the works charged the OKB. The first all metal glider "KAI-12" of the Soviet-Union which is now produced on a large scale originated in this way. Two further types were developed subsequently: The trainer "KAI-10" is a light single-seater-cabin-monoplane; whereas "KAI-11" is a single-seater with open cabin, provided for the elementary training of glider pilots. The second slogan of the OKB is: The Diploma is a real Project. The author discussed with 8 students who passed the final examination; their compositions of diploma are real projects. The tailless airplane "KAI-15" was constructed commonly by Viktor Chudakov and Igor' Andrianov. They aimed

Card 2/4

We Construct, We Build, We Fly

29-3-22/25

at the construction of a sportplane of the lightest weight-class (total weight 500 kilogramm, fuel included) which would be capable of beating world-records. Yuriy Zhidkikh, Niyaz Fayzutdinov and Zhan Dorofeyev projected a record airplane "KAI-16" of the lightest weight-class. Yuriy Kazantsev and Yevgeniy Kuklev built a curious "flying automobile" "KAI-13". This "flying ring" is designed according to the principle of an helicopter, it weighs 150 kilogramm and provides room for one person. Farid Tagirov designed a project for the metal glider "KAI-14" in collaboration with the students of the 4th half-term: V. Platonov, Yu. Denisov, V. Kholdoyanidi. It is 1 1/2 times lighter than the existing gliders of the same type. V. Korchagin designed a portable starting device for gliders. The success achieved by the OKB made it very popular. Now the members of the OKB are thinking of building an own factory. The young men have many ideas, one of which is more interesting than the other. The planning of a jet-propelled training aircraft is of special interest. however. Abstracts of four letters of acknowledgement are published: Yu. Zastela, Director of the Institute, N. Kurshev, Professor, Deputy Director of the Institute of the Scientific Division, Yu. Odinokov, Professor, D. Manokhin, Secretary of

Card 3/4

29-3-22/25

We Construct, We Build, We Fly

the Party Committee KAI.
There are 6 figures.

AVAILABLE: Library of Congress

1. Aeronautics - Study and teaching - USSR

Card 4/4

SEMAKOVA, A.

Building chemical industry giants. Tekh.mol. 26 no.9:7-11 '58.
(MIRA 11:10)

(Chemical industries)

SHEIAKOVA, A.

Research work. NTC 3 no.11:10-14 N '61. (MIRA 14:10)
(Moscow—Manometer—Technological innovations)

SHMAKOVA, A. _

Fields are waiting for fertilizers. NTO 4 no.8:15-18 Ag '62.
(MIRA 15:8)

1. Spetsial'nyy korrespondent zhurnala "Nauchno-tekhnicheskiye
obshchestva SSSR".
(Voskresensk--Fertilizer industry)

SHMAKOVA, A.

A council which has not justified hope. NTO 5 no.2:17-18 F '63.
(MIRA 16:3)

1. Spetsial'nyy korrespondent zhurnala "Nauchno-tekhnicheskiye
obshchestva SSSR".
(Moscow—Machine-tool industry)

VOROB'YEVA, V.; GAYDRIK, P.; KOVALEVA, M.; SHMAKOVA, A.

How are decisions of the presidium of the All-Union Council of Scientific and Technological Societies carried out. NTO 5 no.6: 27-30 Je '63. (MIRA 16:9)

1. Starshiy instruktor Gor'kovskogo oblastnogo soveta professional'nykh soyuzov (for Vorob'yeva). 2. Instruktor Gor'kovskogo Oblastnogo soveta professional'nykh soyuzov (for Gaydrik). 3. Uchenyy sekretar' Gor'kovskogo oblastnogo pravleniya Nauchno-tehnicheskogo obshchestva lesnoy promyshlennosti i lesnogo khozyaystva (for Kovaleva). 4. Spetsial'nyy korrespondent zhurnala "Nauchno-tehnicheskiye obshchestva SSSR" (for Shmakov).

SHMAKOVA, A.

Managers of timber resources. NTO 5 no.12:24-26 D '63.
(MIRA 17:8)

1. Spetsial'nyy korrespondent zhurnala "Nauchno-tekhnicheskiye
obshchestva SSSR".

SHMAKOVA, A. G.

Effect of some fodders on percentage of milk. N. V. Shmakov and A. G. Shmakova. *Zhivotnovodstvo* 1954, 100-4; *Dairy Sci. Abstr.* 17, 203 (1955).—A brief account is given of a series of expts. with 10-16 cows in their 3rd-5th months of lactation. Feeding 3 kg. sunflower cake/head daily to cows receiving grass as basic fodder resulted in a 0.47% increase in the fat content of the milk. The effects of oatmeal and cottonseed cake were less pronounced. Of the bulk fodders investigated, potatoes were the most effective followed by silage (grass and kale), fodder beet, and turnip in descending order. K. L. C.

12

SHENKOVA, A. G., Cand Agrx Sci, -- (diss) "Effect of Bulky Type
~~of Feeding in Raising Quality Dairy Cattle.~~ ^{of Feeding in Raising Quality Dairy Cattle.} Len, 1957. 20 pp
(Min of Agriculture USSR, Len Agricultural Inst), 100 copies
(NL, 50-57, 119)

- 27 -

SHMAKOVA, A.G.

SHMAKOVA, A.G., mladshiy nauchnyy sotrudnik.

Intertelation between the type of feeding young animals and the
subsequent increase in the fat content of milk. Zhivotnovodstvo
19 no.12:42-43 D '57. (MIRA 10:12)

1. Severo-Zapadnyy nauchno-issledovatel'skiy institut sel'skogo
khozyaystva.

(Feeding and feeding stuffs)

(Butterfat)

KAVERZHEVA, K. and SHEAKOVA, F. ✓. Moscow. UdSSR.

"Glycopeptide in Tryptischen Hydrolysaten Von Ovalbumin."

report submitted IV Intl. Cong. of Biochemistry, Vienna, 1 - 6 Sep 1958.

AUTHORS: Kaverzneva, Ye.D., Shmakova, F. V. 62-58-6-27/37

TITLE: The Separation of Glycopeptides From Enzymatic Hydrolysates of Egg-Albumin (Vydeleniye uglevodsoderzhashchikh peptidov iz fermentativnykh gidrolizatorov yaichnogo al'bumina)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 6, pp. 785 - 786 (USSR)

ABSTRACT: The authors undertook to carry out a partial hydrolysis of egg-albumin (without splitting the carbohydrate complex) and to separate and investigate the carbohydrate-containing fragments of the molecule (in this case the peptides). Result: Among the products of the fermentative splitting of egg-albumin carbohydrate-containing peptides were found. These peptides permanently contained the following 5 amino acids (in basic peptides there were 6): arginine, glutamic acid, alanine, proline, and valine; basic peptides, in addition, contained lysine. There are 1 table and 1 reference.

Card 1/2

The Separation of Glycopeptides From Enzymatic
Hydrolysates of Egg-Albumin

62-58-6-27/37

ASSOCIATION: Institut organicheskoy khimii im. N.D.Zelinskogo Akademii nauk
SSSR (Institute of Organic Chemistry imeni N.D.Zelinskiy, AS USSR)

SUBMITTED: January 28, 1958

1. Albumin--Hydrolysis 2. Peptides--Separation 3. Peptides
--Analysis

Card 2/2

SHMAKOVA, F. V.

with Ye. D. Kaverzneva "Extraction of carbohydrate bearing peptide from egg albumin and the determination of its amino-acid content"

report presented at the 10th All-Union Conf. on Highly Molecular Compounds, Biologically Active Polymer Compounds, Moscow, 11-13 June 1958. (Vest. Ak Nauk SSSR, 1958, No. 9, pp. 111-113)

KAVERZNEVA, Ye.D., SHMAKOVA, F.V.

Glycopeptides in pepsin hydrolysates of egg. albumin [with summary
in English]. Biokhimiia 23 no.5:793-799 S-0 '58 (MIRA 11:11)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR,
Moskva.

(EGG WHITE,
ovalbumin, glycopeptides in pepsin hydrolysates (Rus))
(PEPTIDES,
glycopeptides in pepsin hydrolysates of ovalbumin
(Rus))